NETWORKING SPECIALIST (12232)(30005031)

GENERAL DESCRIPTION OF WORK

Positions in this banded class perform highly technical and analytical work in serving as a specialist for networking, enterprise network planning, high-level troubleshooting, security, network system administration and/or networking products and services. Work includes the enterprise design, review of internal and external infrastructure requirements, technology evaluation, testing and developing guidelines for implementation. Specialists may consult with clients and/or vendors to determine future enterprise network systems requirements, their costs, feasibility, design additions, solutions to complex network operating problems and the design of network security systems. Positions may be responsible for developing requests for proposals (RFPs) and contracts for services. Work may require serving as a subject matter expert on the network and associated services including serving as a resource/mentor to analysts in network problem solving and design. This includes determining needs and researching new technologies, additions and improvements. Positions may serve as a technical specialist in network management systems or telecommunications networks (data, voice, video, voice-over IP, etc.), network architecture, network systems administration, network services and converged network services. Positions may serve as supervisors or team leaders within their work units.

CONTRIBUTING

Functional Competency	Examples of Work	Competencies
Technical Knowledge	Independently designs (or redesigns) technical systems of moderate scope and impact and/or key components of larger systems overseen by senior specialists. Evaluates needs and risks and provides solutions accordingly.	Knowledge of complex technical networking systems. Ability to evaluate, design and maintain complex technical systems. Ability to consult and advise on data security requirements.
Technical Support	Provides high-level technical support for issues referred from lower tiers. Provides support for complex issues within either a wide range of technologies or a focused area of specialty.	Sufficient knowledge of technology and resources available to resolve network operating problems referred by analysts or clients.
Planning and Organizing	Provides input and feedback to leadership regarding work standards and processes, policy development, recurring issues and future needs.	Ability to organize and follow complex and/or detailed technical procedures. Ability to identify needs or shortfalls and participate in organizational planning and improvement.
Project Management	Manages complex smaller projects or components of larger projects under the direction of senior specialists. Develops project plans, oversees the work of technicians, and ensures the completion of project goals and objectives.	Ability to manage projects of medium to high complexity and develop project plan, manage milestones and drive project forward.
Consultation Skills	Works with clients on developing custom solutions for specific needs on a smaller scale.	Ability to consult on issues and requests from clients that require the implementation or creation of a custom solution.

JOURNEY

Functional Competency	Examples of Work	Competencies
Technical Knowledge	Serves as a subject matter expert in specialty areas such as network design or network management systems. Provides technical consultation on issues related to the area of specialty and mentors other networking personnel. Analyzes and implements solutions for evolving security requirements.	Extensive knowledge in a technical specialty area. Full understanding of large-scale, multi-component network administration and security requirements. Detailed understanding of technical issues to design architecture for stable technologies. Ability to consult and advise on data security requirements.

Technical Solution Development	Researches, develops and implements new technologies. Develops enterprise guidelines for implementation of new network based products and services.	Ability to develop solutions that impact the statewide/agency/university infrastructure. Ability to investigate, research and implement new technologies to improve network service and/or performance.
Technical Support	Ensures network management tasks such as managing security, access and performance enhancements. . Analyzes network behavior and problems on enterprise-wide data network. Resolves issues with limited precedent and/or with no established remedy process. Performs network management including managing security issues such as patches and the oversight of proper data storage.	Advanced knowledge of technology resources and specialty areas to serve as a resource for analysts. Ability to develop custom solutions for uncommon problems.
Project Management	Manages projects of a large scope which involve the design, implementation and support of network architectures involving a range of technologies. Activities include developing RFPs, supervising staff, managing budgets, directing the activities of vendors/contractors and extensive consulting on client needs.	Ability to manage projects that require directing the work of others and with some latitude on actions or decisions.
Consultation Skills	Works with senior leadership to develop long-range strategic plans and builds client support for IT objectives. Solicits feedback regarding the needs of the user community.	Ability to consult with clients, high-level technicians, analysts and peers to resolve problems. Ability to consult with senior level decision-makers, on an on-going basis, to develop long-range strategic alternatives.

ADVANCED

Functional Competency	Examples of Work	Competencies
Technical Knowledge	Designs architecture for enterprise-wide network infrastructure such as Wi-Fi, fiber optics, and WAN connectivity. Determines security requirements and makes decisions regarding resource allocation/distribution. Ensures appropriate interfaces with other networks and compliance with all associated policies. Serves as a "tier of last resort" in providing support for the most complex, far-reaching and catastrophic networking issues. Designs and develops custom support or analysis tools.	Significant knowledge to be considered the statewide/university/agency expert in an advanced voice, video or data network specialty and serve as a resource for other specialists. Full understanding of enterprise networking landscape and organizational needs. Extensive knowledge to design the most advanced solutions associated with network expansions and integration of new technologies. Ability to consult and advise on data security requirements.
Planning and Organizing	Develops policies regarding networking standards of use. Develops short- and long-term plans for enterprise network needs.	Ability to lead the work unit in long-term planning.
Project Management	Manages the largest and most complex projects such as capital building projects and pilot projects. Directs the work of other networking professionals, makes equipment purchasing decisions, manages other associated fiscal matters, develops technical strategies, and	Ability to manage projects of high impact and/or complexity which involve significant changes to infrastructure or the implementation of emerging technologies.

	ensures that designs meet accepted standards.	
Consultation Skills	Makes recommendations based on feedback regarding the needs of the user community for available technologies or technical solutions. Investigates and analyzes emerging technologies and advises top-level decision-makers.	Ability to consult with clients, high-level technicians, analysts and technical peers to resolve problems. Ability to provide expertise and consulting to committees, boards and/or CIO.

MINIMUM EDUCATION AND EXPERIENCE REQUIREMENTS

- Bachelor's degree in Computer Science, Computer Information systems, Computer Engineering, Engineering, Electronics or related technical degree from an appropriately accredited institution and three years of progressive networking related experience such as network design, analysis or network management;
- Bachelor's degree from an appropriately accredited university and four years of progressive networking experience; or
- An Associate's degree in Electronics or Networking Technology and four years of progressive networking related experience; or an equivalent combination of education and experience
- Journey level requires an additional one year of experience.
- Advanced level requires an additional two years of experience.

SPECIAL NOTE

This is a generalized representation of positions in this class and is not intended to identify essential work functions per ADA. Examples of competencies are primarily those of the majority of positions in this class, but may not be applicable to all positions. Ability to create and maintain collegial working relationships with customers and co-workers, contribute to a positive and inclusive work environment, and serve as a productive team member is expected in all positions.